DOCUMENT RESUME

ED 179 744 CE 023 307

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TITLE An Evaluation of Project EXCEL: Experience Based Career Education Learning Program.
INSTITUTION Education Research Services, Las Cruces, N. Mex.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 79
NOTE 39p.; Not available in paper copy due to thin type

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Academic Achievement; *Career Education; Career Exploration; Employer Attitudes; *Experiential Learning; Field Experience Programs; Parent Attitudes; *Program Effectiveness; Program Evaluation; Senior High Schools; Student Attitudes; Student Experience; Vocational Maturity
IDENTIFIERS *Experience Based Career Education

ABSTRACT

This report presents evaluative information about Project EXCEL (experience-based career education learning program) for the 1978-79 school year. Eight evaluation instruments were used by the third-party evaluator to collect data: (1) student information questionnaire, (2) student plans and perceptions survey, (3) parent opinion survey, (4) resource persons questionnaire, (5) socialization profile, (6) comprehensive test of basic skills, (7) assessment of career development, and (8) student attitude survey. Among the findings of the evaluation was that males comprised approximately two-thirds of the total number of EXCEL students. The 1978-79 EXCEL students reported that they learned a great deal about career planning and career expectations. Parents viewed the EXCEL program as a better school experience than previously encountered by their children. No significant pre- to post-attitude change scores were obtained for the EXCEL students with reference to career planning, careers, attitudes about self, and attitudes toward others. (LRA)

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An Evaluation of Project EXCEL:

Experience Based Career Education Learning Program

78NM033

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CE023307

Educational Research Services
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Las Cruces, New Mexico 88001

1979

U S DEPARTMENT OF HEALTH,
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Table of Contents

	Page
Background Information	1
Purpose	1
Data Collection Instruments	2
Student Information Questionnaire	2
Student Plans and Perceptions Survey	2
The Parent Opinion Survey	2
The Resource Persons Questionnaire	3
The Socialization Profile	3
The Comprehensive Test of Basic Skills	3
The Assessment of Career Development	3
Student Attitude Survey	3
Methodology	3
Results	4
Student Information Questionnaire Summary	4
Student Plans and Perceptions Survey Results	9
Parent Opinion Survey Results	11
Resource Persons Questionnaire Results	14
Socialization Profile Results	16
Comprehensive Test of Basic Skills Results	19
Assessment of Career Development Results	23
Student Attitude Survey Results	27
Summary of Findings	31
Concluding Summary Evaluation Statements	35
Appendix A, Summary of Findings for Program Goals	37

Project EXCEL 1978-79 School Year Evaluation Report

Introduction

Background Information

Project EXCEL (Experience Based Career Education Learning Program) is a alternative secondary career exploration focused education program which began in 1976-77 with funding provided through the 1978-79 school year by the U. S. Office of Education, Washington, D.C., under provisions of the Vocational Education Act of 1963, Part D. The Project, as of the 1979-80 school year, will be continued with funding provided directly by the Las Cruces Public Schools. Dr. Edward Fernandez, Secondary Curriculum Director for the Las Cruces Public Schools, wrote the original proposal for Project EXCEL, and Dr. Zinta Sanders has served as the on-site coordinator for the past three operational years of the Project.

Educational Research Services, Las Cruces, New Mexico, Dr. Don B. Croft, Director, was awarded the contract to conduct the 1978-79 school year evaluation of Project EXCEL. Instruments used in the evaluation were screened and selected by EXCEL staff members and were administered to program participants by EXCEL staff members at appropriate times during the 1978-79 school year. Data analysis and preparation of this evaluation report were completed by Dr. Croft. Separate evaluation report documents for the previous operational years of the Project were prepared on a year-by-year basis and are available for review by contacting the Project Director.

Purpose of This Report Document

This report presents evaluative information about Project EXCEL for the 1978-79 school year. A copy of the overall program evaluation summary

for 1978-79 is attached to this document as Appendix

The evaluation plan specifies instruments to measure the following program and participant attributes:

1. Biographical characteristics of participants.
2. Student attitudes and perceptions.
3. Student academic achievement.
4. Parent responses and opinions.
5. Employer responses and ratings of the program.

As indicated by the attribute areas listed above, the evaluation plan includes the gathering of program-related information from a variety of sources and is thus not restricted to any single, narrowly defined focus.

Data Collection Instruments

Several selected instruments were administered to the 1978-79 participants in Project EXCEL. Some instruments were administered on a pre/post basis to provide summative evaluation information, and are identified and reported as such. Other instruments, providing both formative and summative information, needed to be administered only once. The following data collection and evaluation instruments were used in this evaluation:

1. Student Information Questionnaire (SIQ). The SIQ provides biographical and background information about students.

2. Student Plans and Perceptions Survey (SPPS). The SPPS, developed at the Far West Educational Laboratory, provides information about student attitudes towards the effectiveness of a school or program to help them learn social, academic, and career skills.

3. The Parent Opinion Survey (POS). The POS provides opinion information from parents in reference to the EXCEL program and elicits parent

responses about their children's behaviors and attitudes.

4. The Resource Persons Questionnaire (RPQ). The RPQ was administered to resource persons (employers) who provided on-the-job training and supervised EXCEL students who worked in the community. This instrument assesses EXCEL program coordinators, activities conducted by the resource persons, and social interactions occurring among students and resource persons.

5. The Socialization Profile (SP). The SP assesses the degree to which students have stereotyped views of behavior traditionally considered masculine or feminine. The instrument was developed by I. Broverman, Worcester State Hospital, Worcester, Massachusetts.

6. The Comprehensive Test of Basic Skills (CTBS). The CTBS, published by McGraw-Hill, is a nationally standardized test of student academic achievement which includes subtest measures in reading, language and math; Form 5, Level 4, was used in this evaluation.

7. The Assessment of Career Development (ACD). The ACD, developed by American College Testing Program, measures occupational awareness, self-awareness, and career planning and decision-making perceptions.

8. Student Attitude Survey (SAS). The SAS provides attitudinal responses by students to items which relate to knowledge and information about available school resources, counseling services, the school curriculum, and other school and career related topics.

Methodology

Some of the instruments used in the evaluation of EXCEL were administered pre and post to the students (September and May) while others were given once during the school year. Specifically, the instruments given

pre/post were the CTBS, SP, SAS, and ACD. The instruments administered once were the SIQ, POS and SPPS.

A t-test was used, for the most part, to assess statistical significance of the changes between the pre and post tests. Means, standard deviations, and percentages were used to provide descriptive statistics.

In reporting the results of the Comprehensive Test of Basic Skills (CTBS), a procedure was employed to compare actual post test results for each student with his/her expected scores as projected by available nationally sampled test results. Thus, student academic progress on the CTBS was computed using post test scores and expected scores rather than pre test and post test scores. This procedure provides a more accurate indication of the extent to which students are or are not making expected progress in each subtest area.

Results

Results for each of the instruments used in the evaluation are reported below, beginning with a descriptive overview of the 1978-79 EXCEL participants as depicted from the Student Information Questionnaire. This includes a comparison between eleventh grade and twelfth grade participants in the program. A summary of results is provided for each instrument, with explanatory and interpretive commentary included as needed and appropriate.

Student Information Questionnaire Summary

The SIQ was administered to the students when they entered the program. The relative number of male and female students participating in the 1978-79 EXCEL program at the eleventh and twelfth grade levels was similar: males comprised approximately two-thirds of the total number of participants

at each grade level (67%; 69%). In terms of ethnic composition, white students at the eleventh grade level accounted for about two-thirds of the total number of participants (64.4%). Spanish-speaking students accounted for 22 percent of the participants. At the twelfth grade level, the ethnic composition of students was somewhat reversed: 56.3 percent of the participants identified themselves as Spanish-speaking and 40.6 percent identified themselves as being white. Black, Oriental, and Native American students combined comprised less than ten percent (10%) of the eleventh grade or the twelfth grade participants.

The age distribution of participants in the 1978-79 EXCEL program was about what would be anticipated for eleventh and twelfth grade students; the vast majority of participants listed their age as 16, 17, or 18 years old.

Reported levels of fathers' and mothers' educational attainment among the EXCEL participants were somewhat different for the eleventh grade than for the twelfth grade students. While some 48 percent of the fathers and 38 percent of the mothers of eleventh grade students were reported as having some college education, the comparable figures reported by twelfth grade students were 31 percent and 22 percent respectively.

Both the eleventh and twelfth grade EXCEL participants reported similar percentages of cases where siblings had dropped out of school, with some 33 percent of the eleventh grade participants reporting at least one sibling to have dropped out. Approximately 25 percent of the twelfth grade participants reported having at least one sibling who dropped out.

Career interests and goals expressed by eleventh grade EXCEL participants were diverse, with the most number of students (17%) listing a top career goal in some form of craftwork. This was followed by a professional

Table 1

Student Information Questionnaire
Percent Responding to Items
(N=77)

	Eleventh (N=45)	Twelfth (N=32)
1. Sex		
1) Male	67	69
2) Female	33	31
2. Ethnicity		
1) White	64.4	40.6
2) Black	2.2	3.1
3) Oriental	4.4	
4) Spanish	22.2	56.3
5) Native American	4.4	
6) Other	2.2	
3. Age		
1) 15		
2) 16	22.2	
3) 17	55.6	34.4
4) 18	20.0	53.1
5) 19		6.3
4. Father's Education		
Blank	2.2	9.4
1) None	2.2	
2) Elementary	6.7	15.6
3) High School	13.3	28.1
4) High School Graduate	26.7	15.6
5) College	13.3	18.8
6) College Graduate	28.9	9.4
7) Graduate Level Coursework	.0	
8) Advanced Degree	6.7	3.1
5. Mother's Education		
Blank	2.2	3.1
1) None	2.2	3.1
2) Elementary	6.7	12.5
3) High School	17.8	25.0
4) High School Graduate	33.3	34.4
5) College	11.1	9.4
6) College Graduate	22.2	3.1
7) Level Courswork	2.2	3.1
8) Advanced Degree	2.2	6.3

Table 1
(continued)

Student Information Questionnaire
Percent Responding to Items

	Eleventh	Twelfth
6. Sibs Dropped		
0) None	66.7	71.9
1) 1	26.7	21.9
2) 2	.0	3.1
3) 3	2.2	
4) 4	.0	
5) 5 or more	4.4	
7. Goals		
0) Blank		
1) Clerical	.02	
2) Craftsman	.17	.19
3) Farmer	.02	.03
4) Homemaker		
5) Laborer		
6) Administrator		.06
7) Military	.11	.06
8) Operative	.09	.03
9) Professional	.16	.19
10) Proprietor	.04	.03
11) Protective	.07	.03
12) Sales		.03
13) Service	.02	
14) Technical	.02	.09
15) Other	.13	.16
16) D.K.	.16	.09
8. Expectations One Year After H.S.		
0) Blank	17.8	3.1
1) Full-Time Work	24.4	34.4
2) O.J.T.	4.4	
3) Military	8.9	9.4
4) Full-Time Homemaker		6.3
5) Technical School	8.9	12.5
6) Academic Classes		3.1
7) Technical Classes	11.1	3.1
8) Four-Year College	20.0	25.0
9) Part-Time Work	4.4	3.1

Table 1
(continued)

Student Information Questionnaire
Percent Responding to Items

	Eleventh	Twelfth
9. Major		
0) Blank	8.9	9.4
1) General	37.8	18.8
2) Vocational-Education	17.8	40.6
3) College Prep	20.0	28.1
4) Other	15.6	3.1

10. Parent's Occupation	Father	Mother	Father	Mother
0) Blank		.18		.22
1) Clerical	.02	.16	.06	.13
2) Craftsman	.16		.13	.03
3) Farmer	.04	.02	.03	
4) Homemaker	.0	.42		.59
5) Laborer	.04	.02	.19	
6) Administrator	.11	.04	.10	.03
7) Military	.02		.03	
8) Operative	.04	.02	.06	
9) Professional	.20	.13	.03	
10) Proprietor	.04	.0	.03	
11) Protective	.08	.0	.03	
12) Sales	.04	.0	.03	
13) Service	.02	.0	.03	
14) Technical	.13	.0	.19	

career choice (16%), and a military career goal (11%). Approximately 16 percent of the eleventh grade respondents indicated they "didn't know" what their primary career goal was.

Among the twelfth grade EXCEL participants, the top listed career choice was a tie between craftwork and professional (19% for each), followed by a technical career goal (9%). Only nine percent (9%) of the twelfth grade participants indicated they "didn't know" their main career goal.

The eleventh and twelfth grade EXCEL students had comparable estimates

of what they would be doing one year after graduating from high school: approximately half the students at each grade level indicated they expected either to be working full-time or attending a four-year college. Roughly ten percent (10%) of the respondents (8.9% for the eleventh grade and 12.5 percent for the twelfth grade) expected to be attending some form of technical school.

The school majors of the 1978-79 eleventh and twelfth grade EXCEL students were somewhat different, with almost twice as many twelfth grade participants reporting themselves to be voc-ed majors (40.6% vs. 17.8%). About one of every four twelfth grade participants listed a college prep major, with one of every five eleventh grade participants indicating this major.

The fathers' and mothers' occupations as listed by eleventh and twelfth grade students were similar. The only notable differences were recorded for "professional" occupations (eleventh grade listing substantially more than twelfth grade) and "laborer" (twelfth grade indicating 19 percent and eleventh grade listing only six percent). Fifty-nine percent of the twelfth grade EXCEL students listed their mother's occupation as "homemaker;" the comparable figure for eleventh grade students was 42 percent.

Student Plans and Perceptions Survey Results

The Student Plans and Perceptions Survey (SPPS), as indicated in the introduction to this report, provides information about student attitudes towards the effectiveness of a school or program to help them learn social, academic, and career skills.

In responding to the SPPS, 1978-79 EXCEL students reported generally that they learned a great deal about career planning and career expectations but only an average amount about academic and social matters. As a total

Table 2

Total EXCEL Students
Student Plans and Perceptions Survey
(N=90)

Question	Mean	Scale Response
1. Like school this year.	3.94	liked more than disliked
2. Liked school last year.	3.21	liked & disliked equally
3. Liked school year before last.	2.96	liked & disliked equally
How much learned in area of:		
4. Careers and jobs	3.64	a lot
5. Planning for a career	3.51	a lot
6. Job seeking skills	3.50	a lot
7. How to do a job	3.53	a lot
8. Reading skills	2.76	some
9. Writing skills	2.86	some
10. Math skills	2.70	some
11. Listening and speaking	3.08	some
12. Solving problems	3.02	some
13. Work with others	3.06	some
14. Work with adults	3.37	a lot
15. Accepting different ideas	3.17	some
How school has helped:		
16. Prepare for work	3.37	a lot
17. Prepare for college	2.79	some
18. Decide what to do	3.18	some
19. Understand self	3.07	some
20. Get along with others	3.01	some

group, they did report, however, gaining considerable skill in working with adults, which is viewed primarily as a social skill. In almost every instance, the reponses to the SPPS by eleventh and twelfth grade students were similar.

EXCEL students reported liking school more during 1978-79 than during the previous school year.

Table 3

Student Plans and Perceptions
Mean Responses by Grade Level

Question	Eleventh (N=34)	Twelfth (N=40)	Scale Response
1. Like school this year.	3.7	4.2	liked more than dislike
2. Liked school last year.	2.7	3.5	liked & disliked equall
3. Liked school year before last.	3.1	2.8	liked & disliked equall
How much learned in area of:			
4. Careers and jobs	3.6	3.7	a lot
5. Planning for a career	3.5	3.6	a lot
6. Job seeking skills	3.4	3.6	some
7. How to do a job	3.5	3.6	a lot
8. Reading skills	2.7	2.9	some
9. Writing skills	2.7	3.0	some
10. Math skills	2.6	2.9	some
11. Listening and speaking	2.9	3.2	some
12. Solving problems	2.9	3.0	some
13. Work with others	3.1	3.0	some
14. Work with adults	3.2	3.5	a lot
15. Accepting different ideas	3.1	3.1	some
How school has helped:			
16. Prepare for work	3.4	3.4	strongly agree
17. Prepare for college	2.8	2.8	agree
18. Decide what to do	3.2	3.1	strongly agree
19. Understand self	3.0	3.0	agree
20. Get along with others	2.9	3.1	agree

Parent Opinion Survey Results

A total of 36 parents of students in Project EXCEL survey responded to a questionnaire designed to assess their opinions about the program, staff, and project activities. The response to virtually all items on the POS was favorable. Parents perceive the EXCEL program to be better than previous school experiences encountered by their children, and they see the EXCEL staff as enthusiastic. Parents did report having very little contact with the

Project staff, but what contact they did have was reported favorably. Parents indicated that student motivation to learn was high and that students talked about the program with them at home.

When asked about the occupational plans of students, many parents (22 of 36 responding) seemed to believe that current plans should perhaps be changed, although thirteen of those parents responding indicated that their son or daughter had not yet finalized an occupational plan.

Concerning what their son or daughter would be doing one year after their school graduation, seventeen of the parents responding said their son or daughter would probably be working. Ten said they would be attending college, and six said either they would be attending some form of business or technical school or their child would probably be in the military. The remainder indicated some other expected option.

Table 4

Parent Opinion Survey
(N=36)

Question	Mean	Scale Response
1. How well does EBCE compare to past schools?	4.67	much better
2. If do over, would student participate in EBCE?	4.89	definitely yes
3. How well student liked EBCE compared to past schools?	4.69	much better
4. Have you received enough info about EBCE?	3.89	yes
5. How much opportunity for student to learn about occupations?	4.86	much more
6. Has EBCE helped student form career plans?	4.50	definitely good
7. How much opportunity did EBCE provide for general learning?	4.17	much more
8. How motivated is student to learn?	4.50	much more
9. Rate learning approaches in EBCE.	4.44	excellent
10. How often does student talk about EBCE?	4.14	almost daily
11. How often have you had contact with EBCE staff?	2.57	almost never
12. How many meetings attended where other parents present?	1.25	# meetings attended
13. Rate general ability of EBCE program staff.	4.42	excellent
14. Rate community resources available in EBCE.	4.19	excellent
15. Rate overall relationship with EBCE staff.	3.47	excellent
16. Rate enthusiasm of the EBCE staff.	4.11	excellent

21. What are the occupational plans of students?
No. of students:

13	no firm plans yet
22	plans should be changed
0	plans seem to be good
1	haven't discussed the plans

22. What will student be doing the year after high school?
No. of students:

17	working
10	attending college
3	going to business/trade school
3	military
2	other

Resource Persons Questionnaire Results

Seventy-seven individuals who supervised EXCEL students as they worked on the job during the 1978-79 school year were surveyed by questionnaire to obtain their perceptions of both the students with whom they interacted and the program.

When asked if the EXCEL staff provided necessary and adequate information to them as resource persons, 67 of the 77 respondents said that such information was provided. Only three indicated that needed information was not provided, while the remaining respondents said adequate program information was only sometimes provided. The above responses can be interpreted to indicate that with minor exceptions information about the program needed by resource persons to accomplish their program responsibilities was provided by the EXCEL staff.

The RPQ also included a series of questions asking the resource persons to describe "how often" they interacted with EXCEL students concerning specific assisting and supervisory activities. Means and standard deviations were computed from these responses to depict both the extent and differing kinds of supervisor-to-student interaction. The pattern of responses obtained from an analysis of this portion of the RPQ suggested a moderate amount of interaction in reference to such issues as talking about student's problems and helping students plan assignments. In terms of interacting to assist in non-job assignments, this kind of involvement often occurred. This perhaps suggests a high degree of informal and not totally task-related kind of interaction. Resource persons did say they seldom worked with students as a tutor in an academic area. The overall picture of supervisor-to-student interaction that emerged is thus one of moderate interaction on a rather wide

range of issues, not all directly related to the student's job performance, but with little academic tutoring provided in this context. A lack of academic tutoring on the work site should not, however, be viewed in a particularly negative manner since this activity is not a high priority or expectation in the EXCEL program.

When asked how students spent time at the on-the-job work site, the supervisory resource persons indicated students most often were engaged in activities relating to researching from site materials. A moderately large amount of time was also reported to be spent on performing site activities and observing site activities, as well as interacting with the on-site supervisor.

The resource persons rated the EXCEL program as highly-to-moderately effective from their frame of reference, and they were almost unanimously satisfied with the overall supervision provided the project by the EXCEL staff.

Sixty-two of the responding resource persons said their company expected to continue working with the EXCEL project, while nine said they didn't know at the time of the survey about continuation. Only three respondents said their company was not going to continue working with EXCEL.

In summary, those individuals serving as resource persons and on-the-job supervisors for the EXCEL project viewed the 1978-79 program in very positive terms. They viewed the EXCEL staff as providing needed program information in an appropriate manner, and doing a good job of overall project supervision. They indicated that EXCEL students were involved in a diverse yet meaningful set of activities when on the work site. And finally, with only minor exceptions, the resource persons said their company expected to continue working with the project in the future.

Table 5

Resource Persons Questionnaire
(N=77)

	Yes	No	Sometimes
1. Did EBCE provide you with necessary information?	67	3	6

	Mean	Scale Response
Which of the following services do you provide students?		
2. Talk about job opportunities?	2.31	often
3. Talk about student's problems?	3.31	sometimes
4. Talk about activities at your site?	2.51	sometimes
5. Tutor in an academic area?	2.09	seldom
6. Evaluate student assignments?	3.22	sometimes
7. Assist students in non-job assignments?	3.70	often
8. Supervise students to perform tasks?	3.06	sometimes
9. Help student plan assignments?	3.39	sometimes
How do students spend time at your site?		
10. Observing site activities?	2.62	sometimes
11. Researching from site materials?	3.66	often
12. Performing site activities?	3.34	sometimes
13. Talking with me?	3.25	sometimes
14. Talking with other site personnel?	2.21	seldom
17. How effective EXCEL program?	2.25	high/moderately effecti

15. Satisfied with supervision by EXCEL	70 Yes	0 No	3 DK
16. Company continue work with EXCEL	62 Yes	3 No	9 DK

The Socialization Profile Results

One aspect of the evaluation plan for the project was to determine if EXCEL students during the year changed their perception of behaviors which are typically characterized as stereotypes of "male" or "female" behavior. This evaluative component was included to examine the extent of accomplishment of a project goal to make students more aware that behaviors having job and career implications may be initiated by either sex, and that such behaviors should not be viewed as predominantly "male" or "female."

Results of the pre and post test application of the Socialization Profile are depicted in Table 6 and Plate 1. Generally, the results indicate little change in the way in which the EXCEL students responded to stereotypic behaviors over the course of the year: no statistically significant changes were obtained. It is interesting to note, however, that the direction of change for both eleventh and twelfth grade females in reference to their response to "male" stereotypic behaviors was consistently in the direction of viewing such behaviors as less stereotypically male. Thus, some small degree of accomplishment toward this project goal may have been made, particularly in the above-noted instance. Nonetheless, it would be appropriate for the EXCEL staff to reassess the manner in which they are trying to foster this goal. Interpretively, a half-year period may simply be too short a timeframe within which to dispel such stereotyped attitudes. On the other hand, the learning experiences provided for students relating to this goal may not be as explicit as other experiences which are provided.

Table 6

Socialization Profile

Eleventh Grade
(N=23)

	Male Subjects (N=15)		
	Pre	Post	Diff
Female characteristics	3.7	3.9	.2
Male characteristics	4.3	4.2	- .1

	Female Subjects (N=8)		
	Pre	Post	Diff
Female characteristics	3.7	3.9	.2
Male characteristics	4.2	4.1	- .1

Twelfth Grade
(N=28)

	Male Subjects (N=19)		
	Pre	Post	Diff
Female characteristics	3.8	3.9	.1
Male characteristics	4.5	4.4	- .1

	Female Subjects (N=9)		
	Pre	Post	Diff
Female characteristics	3.7	3.7	0
Male characteristics	4.4	4.2	- .2

*Significant at .05 level

Plate 1

Interpretation of the
Socialization Profile

Eleventh Grade
(N=23)

Male subjects viewed female characteristics as less female.
Male subjects viewed male characteristics as less male.
Female subjects viewed female characteristics as less female.
Female subjects viewed male characteristics as less male.

Twelfth Grade
(N=28)

Male subjects viewed female characteristics as less female.
Male subjects viewed male characteristics as less male.
Female subjects viewed female characteristics the same.
Female subjects viewed male characteristics as less male.

NOTE: In each instance above the statement suggests the direction of change between pre and post test applications of the Socialization Profile and not a statement of obtained statistical difference.

Comprehensive Test of Basic Skills Results

The CTBS was administered on a pre and post basis to assess EXCEL student achievement gains over the course of the 1978-79 school year. Because students enter or drop the program on a semester-by-semester basis, the test was given on a semester basis. Semester results are reported for those students only enrolled in the program for a single term. Total year testing was possible, however, for those students enrolled in the program over the entire 1978-79 school year, and results for these groups of participants are presented for the total year.

In order to provide the most educationally meaningful test results possible using the CTBS, expected post testing scores were computed from the obtained pre testing results. The expected scores were derived based upon a large national sample of CTBS results. In effect, once pre test scores were available for the EXCEL program participants, it was possible to derive a set of anticipated post test scores specifically for this group. When the post test scores were obtained, it was then possible to compare these actual scores with the expected scores. Results of this procedure permit an interpretation of whether or not student achievement gain is consistent with what should be expected given their initial pre test results.

Results of the CTBS assessment for 1978-79 indicate that with only two exceptions, EXCEL student academic achievement gains during the time the students were participating in the program were what could be expected, based on the pre testing results. The first exception concerned eleventh grade EXCEL participants enrolled for the first semester only. As a group, these students increased their language subtest scores more than should have been expected. The second exception concerned twelfth grade EXCEL students enrolled for the entire year. These students also increased their language subtest scores more than should have been expected.

When the composite scores on the CTBS were computed (i.e., taking into account all three subtests), the obtained post test results for all groups were consistent with expected or projected results.

In summary, students participating in the 1978-79 EXCEL program for both a single semester and for the entire year made the achievement gains that could reasonably be expected of them, based upon the gains of other students in a national sample who had similar pre test scores. In the two

instances where EXCEL participant post test results were different than expected, these differences were caused by students making achievement gains that were greater than anticipated.

Table 7

CTBS
Mean, Pre, Post, and Change Scores
for First and Second Semester Students

	Pre	Post	Expected	Diff	t
Juniors (First Semester) (N=31)					
Reading	58	60	60	0	.0
Language	60	63	61	2	2.8*
Math	74	77	75	2	.94
Total Battery	192	200	196	4	.94
Juniors (Second Semester) (N=32)					
Reading	50	51	51	0	.0
Language	50	52	51	1	.82
Math	56	55	58	- 3	1.44
Total Battery	156	158	161	- 3	.96
Seniors (First Semester) (N=22)					
Reading	56	55	57	- 2	.95
Language	54	56	55	1	.56
Math	60	59	61	- 2	.74
Total Battery	170	170	173	- 3	.58
Seniors (Second Semester) (N=21)					
Reading	52	53	53	0	.0
Language	55	53	55	- 2	.90
Math	55	59	56	3	1.02
Total Battery	161	165	162	3	.54

*Significant at .05 level

Table 8

CTBS
Mean Pre, Post, and Change Scores
for Full Year Students

	Pre	Post	Expected	Diff	t
Juniors (N=12)					
Reading	54	55	58	- 3	.95
Language	53	56	55	1	.48
Math	54	58	57	1	.31
Total Battery	161	168	171	- 3	.75
Seniors (N=15)					
Reading	55	56	58	- 2	.49
Language	55	60	56	4	2.44*
Math	57	65	59	6	1.45
Total Battery	166	174	170	4	.33

*Significant at .05 level

Assessment of Career Development Results

The ACD test was administered on a pre/post basis to the population of 1978-79 EXCEL students to obtain an indication of how much career-related knowledge, information and skills they gained over the period of the year. An analysis of results was conducted separately for eleventh and twelfth grade participants and is presented in Table 9.

The results of the analysis as shown in Table 9 indicate that eleventh grade students who participated in the EXCEL program for a full year made significant gains in knowledge of characteristics. Twelfth grade students participating in the program a full year made significant gains in knowledge of preparation requirements. Half-year eleventh grade and half-year twelfth grade (8/78-12/78, 1/79-5/79) respondents gained significantly in general occupational knowledge. Both groups of eleventh grade and half-year twelfth (8/78-12/78, 1/79-5/79) respondents made significant gains in knowledge about the specific occupational areas of social, health and service occupations,

and business sales. Additionally, both groups of eleventh grade students made significant gains in knowledge about business operations. Full-year twelfth grade respondents made significant gains in knowledge about technical and trades. Furthermore, half-year eleventh graders and both groups of half-year twelfth graders showed significant gains on career planning involvement, while full-year eleventh and full-year twelfth graders made gains in career planning involvement as well as career planning knowledge.

It is also worth noting that neither of the groups showed significant pre and post score changes in reference to knowledge about the occupational areas of natural, social and medical sciences, and creative arts. Only one showed gains in the area of technical and trades. It thus may be appropriate for the EXCEL staff in the future to examine the emphasis given to specific occupational and career areas in the program and to determine if new or different emphases may be needed especially relating to those areas where student gains have not occurred in the past.

Table 9

Assessment of Career Development
Mean Pre, Post, and Difference Scores
By Grade Levels

Eleventh Grade - Half year
(N = 16)

	Pre	Post	Diff
Occup. Char. Knowl.	37.3	36.6	- .60
Occup. Prep. Req. Knowl.	11.8	11.4	- .40
General	1.74	1.86	.12*
Soc., Heal., Serv.	1.68	1.81	.13*
Bus. Sales	1.54	1.74	.20*
Bus. Opns.	1.68	1.89	.21*
Tech. and Trade	1.97	2.09	.13
Nat., Soc., Med. Sci.	1.71	1.75	.04
Creative Arts	1.83	1.86	.03
Career Plan Knowl.	2.34	2.46	.12
Career Plan Dev.	1.74	1.99	.25*

Eleventh Grade - Full year
(N = 12)

	Pre	Post	Diff
Occup. Char. Knowl.	36.92	38.75	1.83*
Occup. Prep. Req. Knowl.	12.03	12.25	.17
General	1.73	1.77	.04
Soc., Heal., Serv.	1.61	1.73	.18*
Bus. Sales	1.63	1.68	.05*
Bus. Opns.	1.70	1.83	.13*
Tech. and Trade	1.89	1.89	.00
Nat., Soc., Med. Sci.	1.61	1.65	.04
Creative Arts	1.80	1.83	.03
Career Plan Knowl.	2.43	2.68	.25*
Career Plan Dev.	1.82	2.16	.34*

*Significant at .05 level

Twelfth Grade - Half year
(1/79-5/79 8/78-12/78)
(N = 24)

	Pre	Post	Diff
Occup. Char. Knowl.	36.8	38.0	1.2
Occup. Prep. Req. Knowl.	12.5	12.0	- .50
General	1.71	1.81	.10*
Soc., Heal., Serv.	1.65	1.81	.16*
Bus. Sales	1.57	1.73	.16*
Bus. Opns.	1.61	1.75	.14
Tech. and Trade	1.98	2.03	.05
Nat., Soc., Med. Sci.	1.63	1.71	.08
Creative Arts	1.75	1.83	.08
Career Plan Knowl.	2.38	2.44	.06
Career Plan Dev.	1.95	2.10	.15*

Twelfth Grade - Half year
(4/78-12/78)
(N = 10)

	Pre	Post	Diff
Occup. Char. Knowl.	38.0	38.0	00.0
Occup. Prep. Req. Knowl.	13.0	11.0	- 2.0
General	1.85	1.85	0.0
Soc., Heal., Serv.	1.85	1.79	- .06
Bus. Sales	1.68	1.74	.06
Bus. Opns.	1.86	1.95	.09
Tech. and Trade	2.03	1.96	- .07
Nat., Soc., Med. Sci.	1.73	1.78	.05
Creative Arts	1.90	1.81	- .09
Career Plan Knowl.	2.44	2.51	.07
Career Plan Dev.	2.17	2.36	.19*

Twelfth Grade - Full year

(N = 10)

	Pre	Post	Diff
Occup. Char. Knowl.	37.2	36.3	- .90
Occup. Prep. Req. Knowl.	11.4	12.3	.90*
General	1.74	1.66	- .08
Soc., Heal., Serv.	1.77	1.63	- .14
Bus. Sales	1.76	1.6	- .16
Bus. Opns.	1.64	1.57	- .07
Tech. and Trade	1.86	1.99	.13*
Nat., Soc., Med. Sci.	1.65	1.58	- .07
Creative Arts	1.76	1.61	- .15
Career Plan Knowl.	2.30	2.65	.35*
Career Plan Dev.	1.61	1.96	.35*

*Significant at .05 level

Student Attitude Survey Results

The SAS was administered to EXCEL participants on a pre and post basis as an additional way to obtain information about how student attitudes did or did not change over the school year. The SAS results are of particular interest in that student attitudes are obtained about the program curriculum, counseling services, and the availability of learning resources. It is thus possible to assess these program dimensions as part of the overall evaluation.

Results of the SAS as depicted in Tables 10 and 11 reveal a significantly positive change of attitude on the part of EXCEL students in reference to education in general, school curriculum, school resources, school counseling, learning environments, and career knowledge. In effect, these results suggest that students in the project have found the EXCEL program curriculum and learning activities worthwhile and regard these program attributes favorably.

Interestingly, no pre to post changes were obtained on those SAS items measuring attitudes toward career planning, careers, attitudes about self, and attitudes toward others. In each of these instances, however, the initial pre test scores were relatively high. This suggests that student attitudes about these issues were positive at the outset of the program.

When results of the SAS are looked at by grade level (Table 11) rather than in the aggregate for all students, the aggregate results are replicated with only minor exceptions.

When the eleventh and twelfth grade student responses are looked at separately, the only deviation from the aggregate results occurred in eference to eleventh grade responses indicating attitudes about school resources. These did not show a significant positive increase. For all other subscales, the eleventh and twelfth grade separate analyses were the same as the combined analysis in terms of significant changes in attitude.

Table 10

Student Attitude Survey
Aggregate Mean Pre, Post, and Difference Scores
(N=71)

Attitudes Toward	Pre	Post	Diff
Education in general	3.1	3.9	.8*
School curriculum	2.9	4.0	1.1*
School resources	3.1	3.4	.3*
School counseling	2.6	3.7	1.1*
Learning environment	3.1	3.8	.7*
Career knowledge	3.7	3.9	.2*
Career planning	3.9	3.9	.0
Careers	3.9	3.9	.0
Self	3.7	3.7	.0
Others	3.5	3.5	.0

*Significant at .05 level

Table 11

Student Attitude Survey
Mean Pre, Post, and Diff Scores
By Grade Level

Question	Eleventh Grade (N=30) Pre	Post	Diff	Twelfth Grade (N=36) Pre	Post	Diff
1. Education in general	3.1	3.9	.8*	3.1	3.8	.7*
2. School curriculum	3.1	3.9	.8*	3.1	3.8	.7*
3. School resources	3.3	3.5	.2	2.9	3.4	1.5*
4. School counseling	2.7	3.7	1.0*	2.5	3.7	1.2*
5. Learning environments	2.9	4.0	1.1*	2.8	4.0	1.2*
6. Career knowledge	3.7	4.0	.3*	3.7	3.9	.2*
7. Career planning	3.8	3.9	.1	3.9	4.0	.1
8. Careers	3.9	3.9	.0	4.0	4.0	.0
9. Self	3.8	3.7	- .1	3.7	3.7	.0
10. Others	3.4	3.4	.0	3.6	3.6	.0

*Significant at .05 level

Summary of Findings

An evaluation of Project EXCEL was conducted for the 1978-79 school year. Eight separate measuring instruments were used to assess student characteristics, achievement, and attitudes, as well as parent and resource person opinions toward the EXCEL program. The majority of these instruments employed a survey questionnaire format, although the use of standardized test forms were also used. The following provides a brief summary of the findings of the evaluation

Student Information Questionnaire

1. Males comprised approximately two-thirds of the total number of EXCEL students, with the composition of both the eleventh and twelfth grades reflecting this male to female percentage.

2. The ethnic composition of EXCEL students at the eleventh and twelfth grade levels were different: approximately 64.4 percent of the students in the eleventh grade identified themselves as being white, and 22 percent Spanish-speaking; whereas 40.6 percent of the twelfth grade students identified themselves as white and 56.3 percent as Spanish-speaking.

3. A larger percentage of eleventh grade EXCEL participants reported their parents as having some college education than was the case with the twelfth grade students.

4. Both eleventh grade and twelfth grade EXCEL students with only minor exceptions did have some idea of a preferred career choice, with craftwork and professional career options being most often selected.

5. Almost twice as many twelfth grade EXCEL students reported their school major as voc-ed as was the case for the eleventh grade participants.

Student Plans and Perceptions Survey

6. The 1978-79 EXCEL students reported that they learned a great deal about career planning and career expectations.

7. The students reported learning only an average amount about academic and social matters.

8. The self-report by students indicated they felt they learned a great deal about working with adults during the program year.

9. Participating EXCEL students at all grade levels (i.e., eleventh, and twelfth) said they liked school more during 1978-79 than during previous years.

Parent Opinion Survey

10. Parents expressed the opinion that the EXCEL staff was enthusiastic and doing a good job.

11. Parents viewed the EXCEL program as a better school experience than previously encountered by their children.

12. Almost half the parents responding thought their son or daughter would be working one year after graduation from high school; most other parents said their children would be attending some form of post-secondary education or would be in the military.

Resource Persons Questionnaire

13. Resource persons to the project indicated the EXCEL staff provided adequate project-related information as needed.

14. Resource persons said they had a great deal of personal contact with EXCEL students during the year in reference to a variety of topics, but they did not often serve as an academic tutor to students.

15. Sixty-two of the 77 resource persons responding said their company expected to continue working with the EXCEL project in the future.

The Socialization Profile

16. No statistically significant pre to post score changes were obtained in reference to students viewing traditionally stereotypical "male" and "female" behaviors in a different way.

17. A modest and insignificant but consistent pattern of responses was, however, obtained for both eleventh and twelfth grade female EXCEL students indicating their view of stereotypically male behaviors as being somewhat less pronounced at the end of the year.

Comprehensive Test of Basic Skills

18. Generally, EXCEL student achievement gains during the time the students were participating in the program were what could be expected and predicted, based on pre testing results.

19. Language subtest scores for eleventh grade EXCEL students enrolled the first semester only and twelfth grade EXCEL students enrolled for the entire year were greater than would normally be expected based upon pre test results.

Assessment of Career Development

20. Both the eleventh and twelfth grade EXCEL students in 1978-79 made significant gains in general occupation knowledge, and in knowledge about the specific occupational areas of social, health and service occupations, and business sales.

21. Significant gains were shown for eleventh and twelfth grade EXCEL participants on career planning involvement.

22. Neither the eleventh grade nor the twelfth grade EXCEL participants showed significant pre to post score changes concerning knowledge about the occupational areas of technical and trades, natural, social and medical sciences, and creative arts.

Student Attitude Survey

23. A significantly positive change of attitude on the part of the 1978-79 EXCEL students was obtained in reference to education in general, school curriculum, school resources, school counseling, learning environments, and career knowledge.

24. No significant pre to post attitude change scores were obtained for the EXCEL students with reference to career planning, careers, attitudes about self, and attitudes toward others.

Concluding Summary Evaluation Statement

This concluding section of the report speaks directly to evaluative issues and concerns which emerge from the data analyses as described and reported in earlier sections of the report. These comments are not intended to be definitive, but are rather a summary statement of findings and recommendations for improvement. In order to provide a useful focus, attention is given separately to issues relating to the project staff, followed in turn by comments regarding EXCEL students, and then several statements about project operational and administrative matters.

Based on responses provided by the 1978-79 EXCEL students and by individuals serving as 1978-79 resource persons to the project, it is appropriate to say the professional staff for Project EXCEL did a commendably good job of operating the program during the year.

Project resource persons indicated that staff members provided them with meeded information about the project and about the EXCEL students. Parents aslo reported the staff as providing useful and appropriate information about the project, and while parents reported having little direct contact with the staff, they nevertheless seemed satisfied with the job the staff was doing.

The 1978-79 EXCEL students reported liking school more than they had during previous years. They also indicated believing that the project was beneficial in helping them prepare for tuture work. Student attitudes about the project, in effect, appeared to be positive. In addition, the indication by resource persons was such as to indicate that students were doing a reasonably good job when actually placed in work settings. Student academic achievement during the year was within the range of what could normally be expected, both for those students participating in EXCEL for a single semester and for those participating over the entire 1978-79 school year. And while parents reported student plans for the future were either unsure or perhaps needed revision, students themselves appeared to be considering career options in a resonable manner. In summary, the 1978-79 EXCEL students seemed to be gaining occupational knowledge as a result of project participation, and they appeared to be making satisfactory if not exceptional academic progress. They were supportive and positive about their project experiences and this feeling was shared by their parents and by persons with whom they interacted during on-the-job training.

Appendix A

Summary of Findings for Program Goals

Student Goals

Goal	Instrument	Outcome
1. World of work knowledge	SPPS (4 - 7, 16)	learned "a lot"
2. Gain in achievement	CTBS	equal to expected gain
3. Positive toward world of work	SPPS	learned "a lot," and "some"
	ACD (3 - 6)	significant gain
4. Capable of plan for future	SPPS (5, 16, 17)	learned "a lot," and "some"
5. Capable of problem solving	SPPS (12)	learned "some"
6. Appraising capabilities of others	SPPS (14)	learned "a lot"
	SPPS (20)	learned "some"

Secondary Products

7. Parents positive to EXCEL	POS (1 - 16)	high positive on all
8. Resource persons positive	RPQ	very positive
9. Students positive to EXCEL	SAS	significant gains on six of 10 items
10. Students positive to work	SAS (6)	significant gain for EXCEL
	SAS (8)	no change
11. Students positive to learning	SAS (1 - 5)	significant gain for EXCEL
12. Less sex stereotyping	SP	no significant difference, positive direction